NORTH DAKOTA ENTERPRISE PROJECT MANAGEMENT

STANDARD: STD009-05

EFFECTIVE: January 1, 2005
REVISION #: 3.0
REVISED: December 15, 2008

Project Management of Large Information Technology Projects

Purpose

This standard will ensure accountability for the resources allocated to large information technology (IT) projects as directed by the legislative mandates summarized below, and ensure that a consistent approach will be used to manage large IT projects.

The Information Technology Department is required to:

- Develop statewide IT policies, standards, and guidelines with OMB, based on information from state agencies and institutions excluding institutions under the control of the board of higher education. (NDCC 54-59-09)

- Prepare an information technology plan that contains a list of large projects started, ongoing, and completed during the biennium including planned/actual cost and schedule metrics and evaluation of *cost/benefit analysis* of completed projects (NDCC 54-59-11.1,2)

- Request and review project startup and closeout information (NDCC 54-59-05.7)

- Perform periodic reviews to ensure that large IT projects are within acceptable schedule and cost variances. (NDCC 54-59-23)

The State Information Technology Advisory Committee (SITAC) is required to:

- Perform reviews of IT projects that exceed planned budget or schedule *milestones* by a variance of 20% or greater. The SITAC will review the projects planned corrective measures (NDCC 54-59-23)

- Review agency notifications of IT projects that exceed planned budget or schedule by 20% or greater upon completion (NDCC 54-59-23)

The Legislative Information Technology Committee (IT Committee) is required to:

- Review the startup and closeout reports of any large IT project of the executive, legislative, or judicial branch and Higher Education (NDCC 54-35-15.2 subsection 10, 11, 14)

- Perform reviews of IT projects that exceed planned budget or schedule *milestones* by a variance of 20% or greater and fail to recover within 90 days of presenting the project's planned corrective measures to the State Information Technology Advisory Committee (NDCC 54-59-23)

- If the committee determines that the project is at risk of failing to achieve its intended results, the committee may recommend to the Office of Management and Budget (OMB) the suspension of the expenditure of moneys appropriated for a project or plan. OMB may suspend the expenditure authority if in agreement with the recommendation of the IT Committee (NDCC 54-35-15.3)

The Legislative Council is provided assistance with the implementation of these mandates from the Information Technology Department Policy and Planning Division (ITD) and the State Auditor's Office.

Standard

All *large information technology projects* shall comply with the following directives:

1. A project repository must be maintained by the performing organization to manage and retain critical project documents. If the performing organization chooses to manage documents electronically, the following provisions must be followed.

   1.1. Documents must be stored on a secured environment owned by the state.

   1.2. Performing organizations may choose to allow vendors to manage documents on a privately owned project management/document management system if there is a contractual provision to provide the performing organization with a download of all relevant documentation in periodic increments not to exceed 30 days.

   1.3. Documentation to be retained in repository includes:

   1.3.1. All documents identified in this standard.

   1.3.2. Products of project management which may include meeting minutes, scope changes, deliverable/project acceptance, risk logs, issue logs, quality related documents, budgets, variance reports, recovery plans, schedules, project status reports, RFI/RFP, and Contracts (including all attachments/addendums), and relevant email communications.

   1.4. Upon completion, all documentation must be retained for a period of no less than 3 years.

   1.4.1. Agencies may choose to establish individual records retention policies that include the same or greater documentation requirements and a retention schedule of no less than 3 years.

2. A business case shall be developed to justify the business need for the project and to identify the *proposed solution*.

   2.1. The business case shall minimally include the *project description*, *business need/problem*, *proposed solution*, *consistency/fit with the organization's mission*, *cost/benefit analysis*, and *risks*. The business case should be developed and finalized during the origination process. Additional information and a template can be found in the ND Project Management Guidebook (see Guidance section).

   2.2. After approval by the project sponsor, and prior to any Initiation, Planning, or Execution activities (e.g. RFP, procurement, development, etc.), a business case shall be submitted to the ITD Policy and Planning Oversight Analyst assigned to the project

   2.3. The ITD Policy and Planning Oversight Analyst assigned to the project shall review the business case for general compliance with directive 2.1 and provide comments to the agency within ten business days of receipt.

3. A trained project manager shall be assigned to the project to develop the project plan, manage its execution (including scope, schedule, cost, and quality control), and manage project human resources, communications, risks, and procurements.

4. A project charter shall be developed and executed to initiate the project and to secure commitment for the resources (human, financial, equipment, etc.) necessary for the project.

   4.1. The project charter shall minimally include the following information: project background, *scope*, *objective(s)*, *required resources*, *constraints*, *assumptions*, and project *authority*. The project charter shall be completed prior to the *planning process*.

Additional information and a template can be found in the ND Project Management Guidebook (see Guidance section).

4.2. After approval by the project sponsor, and prior to any Planning or Execution activities a copy of the project charter shall be submitted to the ITD Policy and Planning Oversight Analyst assigned to the project

    4.2.1. The project *sponsor* shall formally approve the project charter in writing.

    4.2.2. A copy (electronic) of the signed project charter shall be submitted to ITD prior to signing of vendor contracts or any project expenditures (Exception: Origination/Initiation activities).

    4.2.3. A signed copy of the project charter shall be retained by the agency.

4.3. The ITD Policy and Planning Oversight Analyst assigned to the projectshall review the charter for general compliance with directive 4.1 and provide comments to the agency within ten business days of receipt.

5. An Executive Steering Committee shall be established to provide management support to the project.

5.1. The committee members shall include at minimum, the project manager, project sponsor, executive level business owners, and executive level vendor representatives . The Policy and Planning Oversight Analyst assigned to the project shall be invited to attend as an ex officio member.

5.2. The committee shall be responsible for reviewing the status at project *milestones*, authorizing significant changes to the project plan, and facilitating decision-making.

5.3. The committee shall meet quarterly, or on a more frequent basis as defined in the project plan.

6. A project plan shall be developed as the primary planning document for the project.

6.1. The project plan shall follow the guidelines of the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK), and include all management sections as defined in the ND Project Management Guidebook and Project Plan Template (see Guidance section).

6.2. The project plan shall identify specific *milestones* throughout the project and their associated cost, schedule, and any associated phase and *deliverables* (see Guidance section).

6.3. After approval by the project sponsor, a copy of the project plan shall be submitted to the ITD Policy and Planning Oversight Analyst assigned to the project.

6.4. The ITD Policy and Planning Oversight Analyst assigned to the project shall review the project plan for general compliance with directive 6.1 and provide comments to the agency within ten business days of receipt.

6.5. Upon request, a current copy of the project plan shall be submitted to Large Project Oversight in conjunction with the quarterly project status report.

7. Project Startup Report

7.1. The intent of this document is to convey information gleaned from the Business Case, Charter, and Project Plan to the Legislative IT Committee at the time when the project has completed the *planning process* and is entering the execution phase (the information contained in this document should not be new. It should be taken from the existing referenced documents).

7.2. The reported budget and schedule will be used to calculate variance during execution of the project.

8. The project status report shall be submitted to ITD on a quarterly basis, or when a milestone exceeds twenty percent of planned cost or schedule. The report should include

an executive summary, budget and schedule (including variance calculations), issues, risks, project accomplishments and upcoming activities.

8.1. Throughout the life of the project, if changes occur which would impact the project *objectives* as stated in the original business case/charter, or changes to cost, schedule, scope or quality as defined in the project plan, those impacts shall be included in the project status report.

8.2. Identified risks and/or issues should be added to the quarterly report as they occur and removed from the report upon resolution.

8.3. The report shall include the attainment of any project *milestones*, and summary information to include (NDCC 54-59-23);

8.3.1. Any variance wherein the project costs exceed the planned costs for that milestone by a variance of twenty percent or more.

8.3.2. Any variance wherein the project schedule extends beyond the planned schedule for that milestone by a variance of twenty percent or more.

8.3.3. Specify corrective measures being undertaken to address any cost or time completion issue.

8.3.4. Both positive and negative cost and schedule variances for *milestones* accumulate for the duration of the project (See Guidance).

8.3.5. Revised budget or schedule baselines will be approved only upon approved scope changes (add or remove) that could not have reasonably been foreseen during the planning phase.

9. ITD shall create a Large Project Summary Report, which summarizes the performance of large projects, and submit it to the Legislative Council once per quarter.

10. A Post Implementation Review (PIR) shall be performed by the agency at the conclusion of the project in order to assess the success of the project and to capture historical information.

10.1. The PIR shall minimally include a review and summary of lessons learned, success stories, product effectiveness, CSSQ management, risk management, communications management, acceptance management, organizational change management, issues management, project implementation and transition, performance of the performing organization, and key project metrics (i.e. cost, schedule, scope, quality). Additional information and templates can be found in the Project Closeout Chapter of the ND Project Management Guidebook (see Guidance section).

10.2. After approval by the project sponsor, a copy of the PIR shall be submitted to the Policy and Planning Oversight Analyst assigned to the project.

10.3. The ITD Policy and Planning Oversight Analyst assigned to the project shall review the PIR for general compliance with directive 10.1 and provide comments to the agency within ten business days of receipt.

11. Project Closeout Report

11.1. The intent of this document is to convey information gleaned from the Post Implementation Report to the Legislative IT Committee at the time when the project has completed the closeout phase (the information contained in this document should not be new. It should be taken from the existing referenced documents).

11.2. The reported budget and schedule will be used to calculate variance.

Policy
Projects are by definition a temporary endeavor undertaken to create a unique product, service, or result. Due to the nature and scale of the projects defined as large IT projects, it is critical that *project management* practices be employed and that processes are in place, increasing the probability of delivering quality products, on time and within budget.

Applicability
According to NDCC 54-35-15.2, this standard applies to all executive, legislative, and judicial branch agencies. The State Board of Higher Education will maintain a separate standard in accordance with NDCC 15-10-44 (1,2,4)

Definitions
1. Acceptance Management – (Post Implementation Report) – This section of the report is intended to capture how the acceptance processes were managed during the project.
2. Assumptions – (Charter) A list of factors, for planning purposes, which are known to be true, real, or certain without proof or demonstration. Assumptions generally involve a degree of risk. (PMI – CSG 3rd Ed)
3. Authority – (Charter) The right to apply project resources, expend funds, make decisions, or give approvals. (PMI – CSG 3rd Ed)
4. Business Need/Problem – (Business Case) Those issues identified as driving the proposed project.
5. CSSQ Management – (Post Implementation Report) – This section of the report is intended to capture how the cost, schedule, scope, and quality processes were managed during the project.
6. Communications Management Plan – (Project Plan) The document that describes: the communications needs and expectations for the project; how and in what format in formation will be communicated; when and where each communication will be made; and who is responsible for providing each type of communication. (PMI – CSG 3rd Ed)
7. Consistency/Fit within the Organization's Mission – (Business Case) How the proposed project will fit within the agency's mission and/or strategic plan.
8. Constraints – (Charter) The state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external to the project, that will affect the performance of the project or a process. (PMI – CSG 3rd Ed)
9. Cost/Benefit Analysis – (Business Case) A dynamic review of the estimated cost, anticipated benefits, and a quantitative analysis justifying the costs for the anticipated benefits.
10. Cost Management Plan– (Project Plan) The document that sets out the format and establishes the activities and criteria for planning, structuring, and controlling the project costs. (PMI – CSG 3rd Ed)
11. Deliverable - Any unique and verifiable product, result, or capability to perform a service that must be produced to complete a process, phase, or project. Often used more narrowly in reference to an external deliverable, which is a deliverable that is subject to approval by the project sponsor or customer. (PMI – CSG 3rd Ed)

12. Human Resource/Staffing Management Plan – (Project Plan) The process of identifying and documenting project roles, responsibilities and reporting relationships, as well as creating the staffing management plan (staffing management describes when and how human resource requirements will be met). (PMI – CSG 3rd Ed)
13. Integrated Change Control Plan – (Project Plan) The process of reviewing all change requests, approving changes and controlling changes to deliverables and organizational process assets. (PMI – CSG 3rd Ed)
14. Issues Management – (Post Implementation Report) - This section of the report is intended to capture how project issues were managed during the project.
15. Issues Management Plan – (Project Plan) - The document describing how issues management will be structured and performed on the project. The issues management plan is different from the issues log that contains the list of ongoing issues to be managed during the execution of the project.
16. Key Project Metrics (Cost, Schedule, Scope, Quality, Objectives) – (Post Implementation Report) – This section of the report is intended to capture specific data related to the original and final metrics of cost, schedule, scope, quality, and objectives as related to the project plan.
17. Milestone – A significant point or event in the project. (PMI – CSG 3rd Ed)
18. Objectives – (Charter) Something toward which work is to be directed, a strategic position to be attained, or a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed. (PMI – CSG 3rd Ed)
19. Organizational Change Management Plan – (Project Plan) – includes processes and tools for managing the people side of the change at an organizational level. These tools include a structured approach that can be used to effectively transition groups or organizations through change.
20. Performance of the Performing Organization – (Post Implementation Report) – This section is intended to capture information related to the performance of the organization as it relates to the success of the project.
21. Planning Process – The planning process is considered complete when the sponsor, project manager, and project team agree that the work to be completed has been decomposed to a level wherein the scope can be delivered and the business objectives of the project met. Management plans should allow the execution of the work to be managed in a controlled manner. Execution related work may not begin until the planning process is complete.
22. Procurement Management Plan – (Project Plan) The document that describes how procurement processes from developing procurement documentation through contract closure will be managed. (PMI – CSG 3rd Ed)

23. Project Background – (Charter) - This section describes, in a manner that the typical Executive Steering Committee member will be able to understand, the history of the project to date. Inputs to this section include the business case project description section, business case solution section, description of any business case risk acceptance decisions, applicable historical information, and any pertinent activities that occurred since the business case was approved.
24. Project Description – (Business Case) - An initial review of the project objectives.
25. Product Effectiveness – (Post Implementation Report) – This section contains a general review of how the product is performing during post implementation. Success stories may be outputs of this portion of the review.
26. Project Implementation and Transition Plan – (Project Plan) - This section includes a description of the high level elements required to successfully transition the project.
27. Project Management – The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. (PMI – CSG 3rd Ed)
28. Project Management Plan – (Project Plan) – A formal, approved document that defines how the project is executed, monitored and controlled. It may be summary or detailed and may be composed of one or more subsidiary management plans or other planning documents. (PMI – CSG 3rd Ed)
29. Proposed Solution – (Business Case) The product of the project that would resolve the Business Need/Problem.
30. Quality Management Plan – (Project Plan) The quality management plan describes how the project management team will implement the performing organization's quality policy. (PMI – CSG 3rd Ed)
31. Required Resources – (Charter) Skilled human resources (specific disciplines either individually or in crews or teams), equipment, services, supplies, commodities, materials, budgets, or funds. (PMI – CSG 3rd Ed)
32. Risks – (Business Case) An uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives. (PMI – CSG 3rd Ed)
33. Risk Management – (Post Implementation Report) – This section of the report is intended to capture how project risks were managed during the project.
34. Risk Management Plan – (Project Plan) The document describing how risk management will be structured and performed on the project. The risk management plan is different from the risk register that contains the list of project risks, the results of risk analysis, and the risk responses. (PMI – CSG 3rd Ed)
35. Scope – (Charter) The sum of the products, services, and results to be provided as a project. (PMI – CSG 3rd Ed)
36. Sponsor – The person or group that provides the financial resources, in cash or in kind, for the project. (PMI – CSG 3rd Ed)
37. Schedule Management Plan – (Project Plan) The document that establishes criteria and the activities for developing and controlling the project schedule. (PMI – CSG 3rd Ed)

38. Scope Management Plan – (Project Plan) The document describing how scope will be managed and controlled on the project.
39. Trained Project Manager – All project managers must have a minimum of 24 contact hours of project management specific training during the six years prior. Obtaining the CompTIA Project + or CAPM certification will substitute for the minimum training requirement.

Guidance

1. Enterprise Project Management Website http://www.state.nd.us/epm
2. ND Project Management Guidebook http://www.state.nd.us/epm/resources/doc/guide.pdf
3. The Project Management Body of Knowledge (PMBOK), Project Management Institute (PMI) http://www.pmi.org.

Non-Compliance

Non-compliance of this standard shall be reported to the State Auditor's Office and the Legislative Council. NDCC 54-35-15 and NDCC 54-10-28 identify the enforcement capabilities for each group respectively. Non-compliance may result in non-approval of any IT expenditures associated with the project.

This policy supersedes ITD Standard STD009-05 v2.0.